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Volunteer Firemen

JANUARY

1943

NATIONAL FIRE PROTECTION ASSOCIATION
INTERNATIONAL
60 Batterymarch Street Boston, Massachusetts

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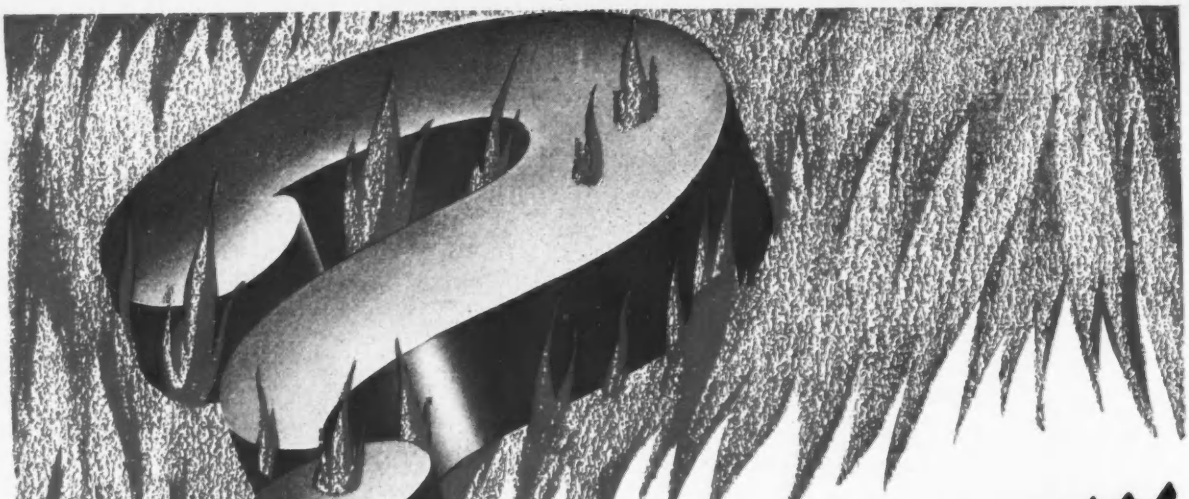
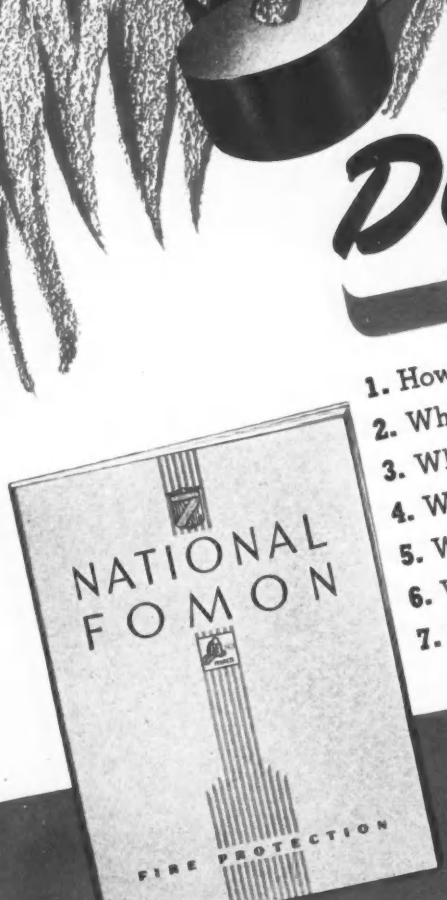


DO YOU KNOW

1. How to extinguish Polar Organic-Solvent Fires?
2. What kind of Fires are best extinguished by Foam?
3. What is the best method to apply Foam?
4. When to use a Portable Foam Generator?
5. When to use a Built-in System?
6. When to use a Single Line Service?
7. When to use a Dual Line Service?



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Volunteer Firemen

Volume 10 — Number 1

Published by the National Fire Protection Association, a voluntary non-profit organization, 60 Batterymarch St., Boston, Mass.

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THE front cover picture this month (*International*) shows Boston firemen searching the ruins of old Amory Hall in East Boston for companions who were trapped when the structure suddenly collapsed during a five alarm fire on the morning of November 15, 1942. Six firemen were killed by this accident and more than 40 others were taken to hospitals. It is said that some 20 of the injured may never be able to return to duty due to the extent of their injuries. Boston's new 125-foot aerial ladder truck had its "back broken" by falling walls, as shown in the picture. Nevertheless the aerial ladder remained in place and proved of great value to rescue workers.

FOLLOWING the Cocoanut Grove fire tragedy in Boston there was considerable clamor from the public throughout the United States demanding that steps be taken to pass fire laws which would make night clubs safe from fire. Attention to the problems presented by such fire disasters is certainly worthwhile.

However, it is a great American pastime to pass a law to correct some undesirable condition and then having passed the law to do nothing more about it. In many cases what is needed is better enforcement rather than more laws. Even where the existing fire laws leave a great deal to be desired, good results can often be obtained by a display of tact and persuasion on the part of fire officials that might not be obtained by enforcement of rigid laws. Modern, up-to-date fire laws are needed but are secondary to adequate enforcement machinery.

A report on the Cocoanut Grove holocaust appears on page 4.

LAST month five departments with 66 men joined the Volunteer Firemen's Section for the first time. Sixty-six departments with 1,297 men renewed membership. This makes a total enrollment of 762 departments and 15,204 men. The following departments are newly enrolled:

Stanford University Fire Department, Stanford University, California.

Mercerville Fire Company, Mercerville, New Jersey.

Lawrence Volunteer Fire Association, Trenton, New Jersey.

Oriskany Falls Fire Department, Augusta, New York.

Amherst Fire Department, Amherst, Ohio.

SMALL communities that habitually lean on some nearby big city for fire protection instead of providing their own local volunteer fire department are likely, sooner or later, to find out the truth of the old adage, "If you want a thing well done, do it yourself."

As has been frequently pointed out in these columns, it is not the primary responsibility of a city to give fire protection or other municipal services beyond the border of the community even when the outside areas bear a fair share of the cost of such services. The responsibility of the city is to its own taxpayers. When possible, city officials may be willing to extend aid to nearby communities but in few cases can it be guaranteed that aid will be given to suburban areas in the event the city fire department is busy at home.

Recently wartime conditions have caused a considerable number of city fire departments to notify suburban areas that men and equipment can no longer be spared for response to outside calls. Thus the outside areas are faced with the difficult problems of organizing their own fire departments and obtaining needed fire equipment in wartime. Had such areas formerly maintained their own well-equipped volunteer fire departments they would be much safer from fire under war conditions. Where organized suburban fire departments exist, the city usually looks upon the neighboring volunteer department as a friend and ally and is glad to cooperate in a plan of mutual aid. At the present time many suburban volunteer fire departments are providing a valuable second line of defense for protection of metropolitan areas from which the suburban communities necessarily draw much of their prosperity.

FOR several years the Christmas Card sent out by the New Toronto, Ontario, Fire Department has proved so popular when reproduced in VOLUNTEER FIREMEN that we are reproducing another of these clever fire prevention messages sent out by this live-wire member of our Volunteer Firemen's Section. The Christmas and New Year greeting distributed by Chief Harold Walton and the volunteer and auxiliary members of the New Toronto Department appropriately carries a wartime fire prevention message.

Our country needs more planes and tanks
More bombs and shells and ships and planks
And more of this and that and those
More trucks and guns and fire-hose.

Right now it's time for us to learn
We can't afford to let things burn.
Of things we have we must take care
As most of them are now quite rare.

Your frying pans and cooking things
Are needed now for bombers' wings
The pipes and fittings, taps and floor,
The beams, cement and hardwood floor
All produce from the mine or tree
Are needed for our ships at sea.

So won't you take more care this year
This war is getting too darn near
If we're to lick this heathen mob
We can't afford to lose our job
Nor store or house, nor suit or dress
By fire caused by carelessness.

And should the Japs or Germans
Begin to make things tough
By dropping on your roof-top
Incendiary stuff,
You'll find we have a well trained squad
We think they are the berries
Who can handle any fire-bomb
Constructed by the Jerries.

So when this war is over
And there's Peace and Gas and Tea
And you thank the Lord for our fighting men
Don't forget the A.R.P.

THE estimated U. S. fire loss for November, 1942, according to the National Board of Fire Underwriters, is $24,144,000, an increase of $322,000 over the same month last year. Losses for the first eleven months of 1942 were $12,716,000 less than for the same period of 1941. These figures are based on notices of incurred loss received by insurance companies, members of the board, plus an allowance for unreported and uninsured losses. The following table shows the losses for the first eleven months of 1941 and 1942.

	1941	1942
January	$26,470,000	$35,565,000
February	26,102,000	30,819,000
March	31,471,000	30,505,000
April	29,330,000	27,960,000
May	25,637,000	23,233,000
June	24,943,000	22,410,000
July	23,698,000	21,000,000
August	24,122,000	19,680,000
September	24,668,000	20,443,000
October	30,833,000	22,621,000
November	23,822,000	24,144,000
Total 11 months	$291,096,000	$278,380,000

488 DEAD IN NIGHT CLUB FIRE

View of the Shawmut Street side of the night club as soldiers and sailors assisted firemen and ambulance workers in carrying out the victims. *Acme*

International

One of the artificial cocoanut palms placed about the night club to lend "atmosphere." The walls and ceilings were covered with various fabric decorations across which the fire spread very rapidly.

THAT 488 persons could die in a fire in a night club was a fact that stunned nearly everyone who heard about the Cocoanut Grove disaster in Boston, November 28. The radios and newspapers reported the facts apparently responsible for the loss of life: (1) inadequate and locked exits, (2) quick burning decorations.

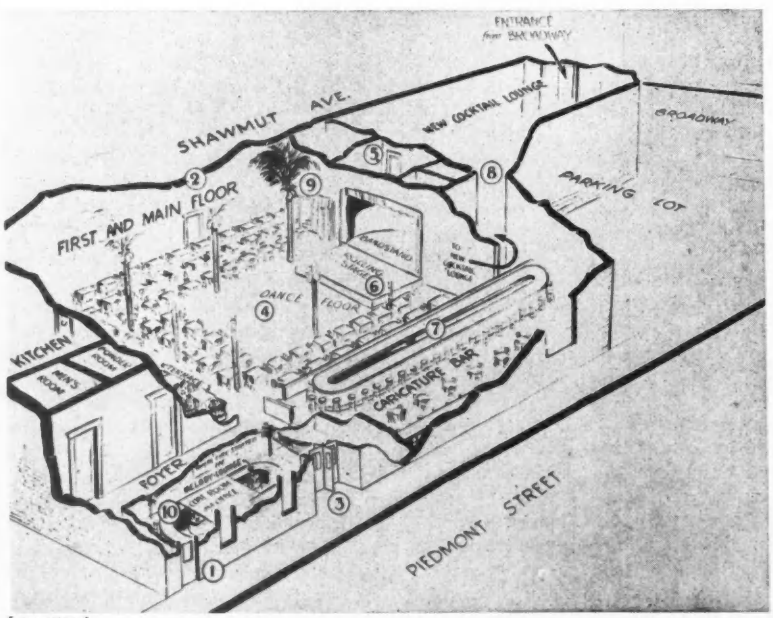
These were not new or unknown possibilities. The same circumstances had shown up in disasters in other cities: the negro dance hall fire in Natchez (207 dead); the Club Rendezvous, outside Chicago (7 dead); the Detroit Study Club (22 dead); Lum's Chinese Restaurant in New York (9 dead) and numerous others. In June, at Rio Casino, another night club, a palm tree like the combustible decorations at Cocoanut Grove had demonstrated the possibilities of disaster right in Boston for everyone to see.

Can proper laws prevent such recurring tragedies? Most people don't see why not. But the same people who want laws do not understand that they must also want public officials who, first, know what needs to be done, and, second, will administer safety requirements fairly.

Cocoanut Grove and the like disas-

International

Stairs from the basement "Melody Lounge" where the fire started are at the left of the door shown above. This door is reported to have been locked. It is indicated that a number of persons perished in the corridor shown, because of the locked door.

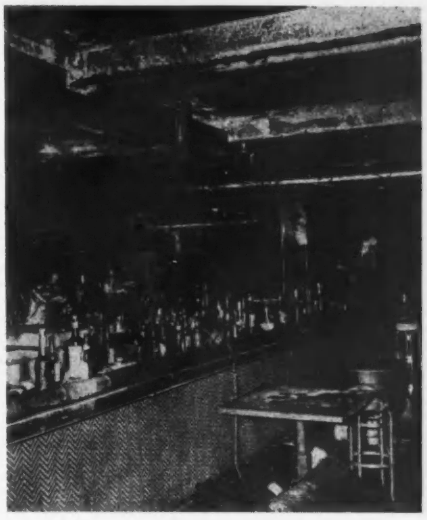


International

Newspaper artist's conception of the Cocoanut Grove: (1) Door at head of stairs from basement lounge which was found locked, (2) Rear door leading to Shawmut Street through which some occupants escaped, (3) Main entrance where several hundred persons reportedly perished behind revolving door, (4) Dance floor, (5) Dressing rooms for performers, (7) main bar, (8) Entrance to New Cocktail Lounge into which the fire flashed causing further loss of life, (9) Stairs leading to second floor dressing rooms by which a few persons escaped, (10) Location of basement lounge where fire started. (This diagram is not accurate in detail).

Left. Remains of revolving door where it is reported that more than 200 persons lost their lives.

Right. Basement Melody Lounge where fire started.



ters have an important lesson for other communities. The lesson is not primarily a need for new laws but for fire department and building department inspection forces who are competent, knowing thoroughly what needs to be done, and who will act with honesty and fairness.

The Cocoanut Grove night club property, when viewed from the outside, would not have impressed the observer as being what is commonly called a "fire-trap." The main building was of one-story "fire proof" construction but was unsprinklered. It was of irregular shape with a frontage of about 100 feet along Piedmont Street and a depth of about 90 feet running through to Shawmut Street. Both of these streets were narrow.

The tragedy started when fire broke out in the basement in a cocktail lounge. The blaze is said to have been first noticed in an imitation palm tree after a bus boy struck a match for a light while replacing an electric bulb near the ceiling. However, other testimony leads to the question whether defective wiring may have had something to do with the start of the fire, or whether there may have been some other unexplained factor.

In any event and regardless of the source of ignition, the stage appears to have been set for disaster. The fire occurred on a Saturday evening following some notable football games. The night club (reported seating capacity 460 persons) was packed by an estimated crowd of 1,000. The loss of life exceeded the reported seating capacity of the Cocoanut Grove.

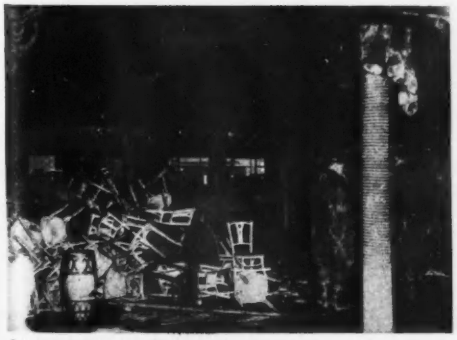
A single stairway provided the only public access to and from the lounge in the basement. At the head of this stairway was a doorway to the street but this door was locked and accordingly was not available as an emergency exit. This condition made it necessary for the persons in the basement lounge to pass through a first-floor hallway and lobby and join the throng attempting to leave by the revolving door at the main Piedmont Street entrance. It is said that at least two hundred of the victims perished behind this revolving door.

THE N.F.P.A. Building Exits Code outlines requirements by the application of which this and like disasters might be prevented. In most cities fire and building departments have broad general powers to require safe conditions. The Building Exits Code provisions could be used as the basis for corrective orders issued under such authority.

This code, a recognized national standard for life safety from fire in buildings, was first adopted by the N.F.P.A. in 1913. Among its recommendations are requirements for two separate and adequate means of exits from places of public assembly. These exits must be located so that in the event one means of escape is cut off during the early stages of a fire the other exit will be readily available. The code also bans revolving doors as fire exits. Where revolving doors are used a swinging door must be immediately adjoining or at least within 20 feet.

One other lesson of this fire is obvious. Too much reliance should not be placed on flameproofing of combustible decorations to stop the spread of flames. Flameproofing, while highly desirable to prevent ready ignition of drapes and other fabrics by a small flame or spark, may not stop a fire from sweeping along decorations.

A standard automatic sprinkler system, on the other hand, would have prevented this tragedy. A few sprinkler heads, opened by the heat of the fire, would have stopped the blaze in its incipiency.



Left. Dance floor and main dining room of the ill-fated club.

Right. Main entrance to Cocoanut Grove on the Piedmont Street side. The revolving door may be seen just inside this arcade.

All photos on this page by International

FIREMEN'S TRAINING ACTIVITIES

CONSIDERABLE firemen's training activity has been reported since the summary of 1942 firemen's training work reported in the November 1942 issue of VOLUNTEER FIREMEN.

California. J. C. Beswick, Chief, Bureau of Trade and Industrial Education, California Department of Education, reports that a total of 13,268 firemen received training under the firemen's training program during 1942. Of this number 3,584 members of 201 fire departments completed one or more units of the comprehensive training course given under the direction of field instructors. A total of 10 units of the 17 unit course were given during the year with an average of 15 hours of instruction given to each department. In addition to the comprehensive courses 43 district short courses were held with 1,614 men from 162 departments in attendance. During 1942 local drillmasters trained under the state program gave instruction to 8,070 firemen.

Iowa. Following the return of Iowa representatives from the OCD Teacher Training and Leadership Conference, held November 9-20, 1942, at Oklahoma A. & M. College, a series of training schools for fire department instructors were scheduled. Each department was invited to send one of its best men to serve as instructor for every 25 firemen in the department. The training schools start at 3 P. M. and run to 10 P. M. for five evenings. Certificates will be granted upon completion of the course. The instructors are expected to pass on the training to their home fire departments. It is believed that Iowa will have 300 instructors by the end of the winter.

Minnesota. Fire Marshal Leonard C. Lund reports that during 1942 ten regional fire schools were held in Minnesota with a total attendance of 1,444 men from 226 towns. In addition the Northwest Fire School held at the University of Minnesota on May 18-20, had an attendance of 237 men from 85 departments. This made a total attendance for the year of 1,681 men from 311 departments.

The following regional fire schools were held: Arrowhead Regional at Hibbing, May 22-23, 222 men from 25 towns; West Central Regional at Madison, June 21, 75 men from 16 towns; Northern Regional at Hallock, July 19, 120 men from 16 towns; Southwest Regional at Pipestone, July 26, 231 men from 48 towns; United Fire Fighters at Jordan, July 26, 190 men from 30 towns; Cuyuna Range at Staples, August 9, 129 men from 19 towns; St. Croix Valley at Columbia Heights, Aug. 23, 147 men from 15 towns; Northwest Regional at New York Mills, Aug. 30, 134 men from 21 towns; Southeast Regional at Plainview, Sept. 30, 107 men from 21 towns; and Lake Region Regional at St. Cloud, Sept. 13, 89 men from 15 towns.

Washington. Chief Thomas S. Ward, Fire Protection Officer, 9th OCD Region, reports that during 1942 7583 firemen in the State of Washington attended 268 regional firemen's training conferences. Subjects given were: ladder work, forcible entry tools, tower drill, ventilation, nozzles, pumping, salvage, first aid, gas and smoke masks, types of fires, and hose operation and care.

7th OCD Region. Lindon J. Murphy, OCD Regional Fire Defense Adviser, reports that the state departments of vocational education and the state boards of trade and industrial education are now taking the responsibility for financing and organizing the firemen training programs in the following states: **Colorado.** The Director of Vocational Education is taking over direction of the program. **Kansas.** The State Board for Vocational Education has agreed to sponsor the training program. **Nebraska.** The State Board for Vocational Education is actively supporting the training program. **North Dakota.** The Supervisor of Trade and Industrial Education is backing the training program. **South Dakota.** The Supervisor of Trade and Industrial Education is supporting the program.

Ontario. A four day extension course for fire fighters was held at the University of Toronto, November 25-28, 1942. The course, arranged in cooperation with the Ontario Fire Marshal's Office and the Dominion Association of Fire Chiefs, was attended by several hundred representatives of municipal and industrial fire departments. The program featured addresses by outstanding fire protection authorities of Canada and the United States and demonstrations of practical fire fighting evolutions conducted by the Toronto Fire Department. Among the speakers taking part in the program were the Honourable G. D. Conant, K. C., Prime Minister and Attorney-General of Ontario; Chief A. E. Woods, President, Dominion Association of Fire Chiefs; W. J. Scott, K. C., Ontario Fire Marshal; W. L. Clairmont, Dominion Fire Commissioner, and N.F.P.A. Engineer, Charles S. Morgan.

The N.F.P.A. Firemen's Training Committee is shown at its annual meeting in Chicago, December 2. Standing in the middle of the picture is Percy Bugbee, General Manager, N.F.P.A. At his right in center of table, reading from left to right, are Richard E. Vernor, chairman, Fire Department Instructors' Conference, Western Actuarial Bureau, Chicago; George J. Richardson, Secretary-Treasurer, International Association of Fire Fighters; Clarence E. Ridley, Director, International City Managers' Association; and Roi B. Woolley (guest), Coordination Unit, Fire Defense Section, U. S. Office of Civilian Defense, Washington. Seated around the table, left to right beginning at the far left hand end, are Chief Frank McAuliffe (guest), Chicago Insurance Patrol; Assistant Chief George Lockhart, Minneapolis Fire Department; L. C. Anderson, representing committee member W. J. Scott of the Ontario Fire Marshal's Office; J. F. MacMillan, Director of the Florida Fire College; C. S. Morgan, N.F.P.A. staff; Emmett T. Cox of the Indiana Inspection Bureau, Associate Director, Indiana Fire Service Training Schools; R. J. Douglas, Secretary of the committee, Fire Marshal, Beech Aircraft Corporation of Wichita, Kansas; W. Fred Heisler, Chairman of the committee, Associate Director, School of Technical Training, Oklahoma A. & M. College; Horatio Bond, N.F.P.A. Chief Engineer; J. W. Just, Director, Fire Service Extension, University of Maryland; Harry K. Rogers, Chief Instructor, Western Actuarial Bureau of Chicago; Chief A. J. Mullaney, Chicago Fire Department; Clarence Goldsmith, Assistant Chief Engineer, National Board of Fire Underwriters; Jack Mason (guest), Acting Chief, Fire Defense Section, U. S. Office of Civilian Defense; and George Anderson (guest), Assistant State Fire Marshal of Illinois.

OCD Aids in Training Fire Department Instructors

THE U. S. Office of Civilian Defense is offering substantial aid to the firemen's training programs of the various cities and states through a series of regional instructor training and leadership conferences designed to provide approximately 15,000 new fire department instructors in the United States by the middle of February 1943. These additional instructors should make it possible to considerably augment existing firemen's training programs and bring the latest information on wartime fire fighting to all firemen.

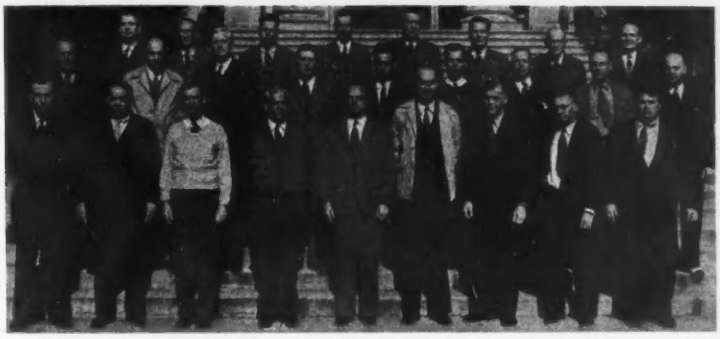
The first regional OCD instructor training program was conducted at State College, Pa., October 12-23, and was attended by 23 picked fire service representatives from the First, Second, and Third Civilian Defense Regions, including the east coast states as far south as Virginia.

The second regional conference was held October 26 to November 6, at Purdue University, Lafayette, Ind., and was attended by representatives of the Fourth, Fifth and Sixth OCD Regions. These regions cover the remaining states east of the Mississippi River.

The third regional conference was held at Oklahoma A. & M. College, Stillwater, November 9-20. This conference was arranged for representatives of the Seventh and Eighth OCD Regions which include the states of Arkansas, Colorado, Iowa, Kansas, Louisiana, Minnesota, Missouri, Nebraska, New Mexico, North Dakota, Oklahoma, South Dakota, Texas, and Wyoming.

Fire service representatives attending these conferences are shown in the photographs on this page. Each of the conferences included 80 hours of instruction in teacher-training. The attendance at the three conferences totalled 117, or an average of three representatives for each state. The program is designed to make teacher-training facilities available to give every fire department the qualified instructors needed to carry out an adequate wartime training. In the past many experienced firemen when assigned to training work have found it difficult to pass on their experience because of lack of understanding of the technique of conducting a systematic measured training program.

The three regional teacher training conferences conducted by the Fire Defense Section of OCD were directed by W. Fred Heisler, firemen's training consultant for OCD and Chairman of the N.F.P.A. Committee on Firemen's Training, assisted by Emmett T. Cox, of the Indiana Fire Service Training Schools.



REGIONS 1-3, PENN STATE. Left to right, front row: John Caldwell, OCD, Boston; F. C. O'Neal, Harrington, Del.; W. H. Brittingham, Lewes, Del.; Capt. C. J. Carroll, Newark; Capt. Farquhar Langton, Springfield, Mass.; Emmett T. Cox; W. Fred Heisler; Dist. Ch. L. M. Goodman, Forest Hills, Pa.; C. L. Armstrong, Rockville, R. I.; Second row: Ch. G. T. Morgan, Wilmington; Capt. N. Jones, Providence; Dep. Ch. D. J. Coughlin, Boston; Lt. J. J. Cowan, Bangor, Maine; Ch. P. L. Burnett, Highland Spring, Va.; Capt. J. S. Cioffi, Jr., St. Albans, Vt.; Ch. H. I. Eames, Reading, Mass.; Asst. Ch. C. C. Arnold, St. Johnsbury, Vt.; Lt. W. G. Whalen, Pittsfield, Mass. Third row: Capt. J. H. Sawyer, Trenton, N. J.; C. C. Larrimore, Easton, Md.; H. E. Swain, N. H. Dept. of Education; Ch. C. H. Nott, Hanover, N. H.; T. G. Basil, Annapolis, Md.; Simon Clopper, Smithsburg, Md.; Asst. Ch. Henry Haddock, Lynn, Mass.; Capt. F. R. Bingemann, Sr., Camden, N. J.

REGIONS 4-6, PURDUE. Left to right, front row: Batt. Ch. F. B. Lucas, Dayton; Lt. J. F. Seagraves, Atlanta; F. H. Slavin, Cincinnati; O. E. Williamson, Mich. State Police; W. Fred Heisler; Asst. Ch. W. B. Parrish, Rocky Mount, N. C.; Roy Conner, Knoxville; Asst. Ch. J. Kinney, Aurora, Ill.; Ch. C. L. Burkett, Salisbury, N. C.; Capt. C. R. Richter, Savannah; Tom Brooks, Clinton, Ill. Second row: Ch. A. F. Zay, River Forest, Ill.; Lt. G. W. Oehlet, Maywood, Ill.; Sherwood Brockwell, N. C. State Fire Marshal; R. F. Hamm, Ind. State Fire Coordinator; Batt. Ch. Frank McNea, OCD, Cleveland; Norman Conrad, OCD, Chicago; Ch. J. F. MacMillan, OCD, Atlanta; Asst. Ch. L. J. Curry, Kalamazoo; Batt. Ch. A. F. Craig, Indianapolis; Emmett T. Cox. On step: (left) Capt. C. A. Fischer, Orangeburg, S. C.; (right) Ch. H. A. Lettenberger, Kiel, Wis. Third row: Ch. C. L. Nicol, Sterling, Ill.; Capt. V. A. Beam, Louisville; Ch. L. F. Elkins, Decatur, Ala.; Capt. James Hassett, Cincinnati; Ch. J. F. Hosemann, Vicksburg; Lt. A. H. Tanske, Highland Park, Mich.; Ch. W. T. Banning, New Philadelphia, Ohio; Capt. G. F. Vernotsy, Akron; T. F. McManamon, Cleveland. Fourth row: Karl Scheidler, Toledo; Batt. Ch. W. M. Walton, Birmingham; Capt. E. P. Lovell, Memphis; J. R. Mercer, W. Va. Univ.; Lt. G. E. Hackney, Flint; Asst. Ch. E. E. Wischer, Milwaukee; J. W. Corder, Charleston, W. Va.; F. A. Hartman, Lawrence, Ind.; Asst. Ch. M. G. Kay, Greenville, S. C.; Capt. W. B. Hoelcher, Columbus, Ohio. Fifth row: E. L. Neff, Madison, Wis.; Capt. C. H. Whitaker, Jackson, Miss.; W. L. Loos, Sterling, Ill.; A. P. Smilda, La Cross, Wis.; Lt. G. R. Cromartie, Jacksonville; Asst. Ch. A. H. Meister, Anderson, Ind.; J. E. Hutchins, Macomb, Ill.; Capt. A. Witschinski, Lansing; Capt. J. W. Davis, Miami, Fla.; Asst. Ch. J. T. Kraver, Mobile.

REGIONS 7-8, OKLAHOMA A. & M. Left to right, front row: Capt. F. R. Dimond, Hutchinson, Kas.; Capt. Harley Yocum, Atchison, Kas.; S. G. Mortimer, S. D. Dep. State Fire Marshal; Asst. Ch. E. Hudlburg, Stillwater, Okla.; Asst. Ch. R. E. Akin, Beaumont, Tex.; Asst. Ch. J. R. Dobson, Corpus Christi, Tex.; Capt. J. R. Dickout, Dallas; C. J. Norred, Shreveport; J. N. Norwood, Baton Rouge, La. Second row: Capt. A. Nielson, Laramie, Wyo.; Capt. Elmer Urban, Omaha; Ch. T. S. Ward, OCD, San Francisco; Emmet T. Cox; W. Fred Heisler; L. J. Murphy, OCD, Omaha; Ch. H. E. Homan, Bismark, N. D.; Ch. Carl Lewis, Cape Girardeau, Mo.; M. T. Gaffey, Kansas City, Kas.; Capt. G. D. Summers, New Orleans. Third row: Capt. J. E. Hurley, Little Rock; Ch. M. Kelliher, Casper, Wyo.; Capt. B. Nestlebush, Omaha; E. J. Bakes, Sterling, Colo.; Asst. Ch. E. A. Colglazier, Pueblo, Colo.; Dist. Ch. A. L. Rathke, San Antonio; H. N. Walker, S. D., Dep. State Fire Marshal; Ch. H. F. Hemphill, Marshalltown, Iowa; W. E. Towell, Asst. State Forester, Missouri; Ch. W. B. Walden, Columbia, Mo.; Ch. J. L. Matchael, Carthage, Mo.; W. H. Kammann, St. Louis; Ch. E. E. Bowen, Chillicothe, Mo.; Asst. Ch. W. J. Cook, Shreveport, La.; Asst. Ch. A. Broussard, Lafayette, La. Back row: R. E. Tope, Grand Junction, Colo.; Ch. C. E. Hines, North Platte, Neb.; E. C. Iverson, Ponca, Neb.; A. E. Carter, Neb. State Fire Marshal; J. I. Fetters, Lincoln, Neb.; Ch. E. E. McCallum, Eagle Grove, Iowa; Capt. James Peterson, Grand Forks, N. D.; V. C. Karnsnick, Kirkwood, Mo.

MAKING A GOOD JOB OF IT

BY WARREN Y. KIMBALL

RECORDS OF FIRES

EACH veteran fire fighter has one qualification which only time can give—and that is experience obtained in fighting the outstanding fires that have occurred in his community through the past years. Nevertheless, the very element—TIME—which gives him his backlog of experience, is at the same time robbing him of this one qualification that makes the veteran more cool headed and reliable in an emergency than the average rookie.

Check up on the old timers in your fire company. Ask them some specific questions about their experiences at outstanding fires. You are likely to find that their minds have become rather hazy or confused about many of the details as to what actually took place. If you check the stories of several of the "vets," you are likely to find that there is substantial disagreement as to certain aspects of what happened at outstanding fires.

Perhaps, if you have a flair for local history, you will decide to look up in the department records to see just what did happen at the big fires in your town. You are likely to be disappointed, however, unless your department has done a better job of keeping fire records than many fire departments have done in the past. Old time fire department records, sad to say, were apt to consist of little more than an attendance roll, and perhaps a record of the company's expenses entailed in celebrating the victory over the fire in question. Apparently, most fire department secretaries have been content to let the local newspaper chronicle lurid and often exaggerated accounts of the home town's famous fires.

However, neither newspaper accounts nor the memories of fire fighters can furnish reliable substitutes for a good fire department report covering each major fire that the department is called upon to fight. If there is any doubt upon this important point it should be kept in mind that our protection against future fires is largely based upon the success or failure of our efforts to combat fires that we have already experienced. Thus, while it is commonly said that "no two fires are alike," this is only true in the sense that "no two persons are just alike." Nevertheless, the surgeon uses the same technique in removing your tonsils or appendix that has already proved successful in thousands of other similar cases. So too, the fire fighter will be successful in fighting future fires in the same measure that study has been made of past fire fighting experience. Likewise, successful fire prevention efforts to a large extent, depend upon study of the factors that have caused the previous fires, in order that such factors may be known and guarded against.

PERHAPS the reason why many fire departments do not keep adequate records of the fires that they fight is because they have never made a study of just what information regarding a fire is of value and therefore should be recorded. The fire report forms included in the "Model Records and Reporting System for Fire Departments," a book published by Public Administration Service, 1313 East 60th Street, Chicago, furnish a valuable guide to any fire department desiring to keep proper fire records. The "Report of Fire in a Building" illustrated in the volume is reproduced here. This form, prepared after study of the experience of thousands of fires and numerous fire report record forms, shows the type of information that is likely to be worth recording about any building fire that a fire department may be called upon to fight. This form is available from Public Administration Service at a cost of $2.50 per 100, or $17 per 1000 copies on 8½ by 11-inch sheets, 50 sheets to a pad. A less detailed fire report form is recommended for use in recording rubbish, grass, automobile or false alarms.

Perhaps a brief review of the more important factors usually covered by a fire report form may prove helpful to departments desiring to check up on their own fire record files. Any careful check of even the most detailed newspaper accounts of fires will reveal that a surprising number of important details about a fire are not reported in the public press simply because they are not news—no matter how important such details may be to any intelligent appraisal of the fire in question.

Of course, the most meagre fire report form should show the date and time when the fire occurred. the name of the property involved and the tenant, and the exact location of the fire.

The fire report form should also indicate how the building was occupied, and the kind of goods manufactured or sold, if any. The report should also state the room or building in which the fire occurred and the floor on which it started.

One of the most important sections of any fire report gives the details of the construction of the building involved in the fire, stating the wall, floor, and roof construction and indicating any floor openings in the building through which fire might have spread and how these were protected.

Adequate information regarding the cause of the fire is also important. It is not enough to just jot down "defective wiring," or "careless smoking." It is much better to give a description of just what happened leading up to the start of the fire, especially when any manufacturing process or special hazard is involved. In other words, a narrative account of what caused the fire is worth a lot more than any formal classification of causes.

Another class of information that the fire department will want to record is the detail as to how the fire was discovered and how the alarm was transmitted. Explanation of any delays in transmitting the alarm to the fire department should be recorded. Also important in this connection are details of the performance of any watchman service or private fire alarm devices.

OBVIOUSLY, an adequate record of the fire fighting operations deserves to be an important department of any good fire report. Data should be provided to indicate the type of fire companies and apparatus employed; the number of hose streams of various sizes that were used; the firemen that were present; any private fire protection equipment such as extinguishers or standpipe hose that was used either by the occupants or by the fire department. Special attention should be given to the proper recording of the performance of automatic sprinkler equipment, if provided. This should show the type of sprinkler system, the number of sprinkler heads which operated on the fire, and the general performance of the sprinkler equipment. If for any reason the sprinkler performance was not fully satisfactory, the report should indicate the reasons for the unsatisfactory operation in order that the conditions responsible could be remedied and guarded against.

No report of the fire fighting operations is complete unless a brief account is included of the strategy used to control the fire. Such an account should indicate the status of the fire upon the arrival of the department and the disposition of the fire crews in controlling and extinguishing the fire. Usually a sketch of the fire layout will be of

great value as a supplement to this part of the report. Photographs of the fire may also be useful in any future study of the fire report.

ANOTHER important part of the fire report which is often slighted is a detailed record of any loss of life or personal injuries that resulted from the fire. This is very important so that the causes of such accidents may be known and guarded against in the future. The report should attempt to show why the loss of life occurred. All too often unthinking persons confuse the cause of a fire with what is more important—the cause of loss of life or injuries resulting from the fire. For example, a fire may have been started in the basement from an overheated furnace but the cause of the loss of life may have been due to lack of adequate exits for persons on the upper floors, or lack of alarm facilities to promptly warn the occupants, or unprotected stair and elevator shafts which allowed the flames to shoot upward through the building cutting off the escape of the occupants. Such causes of loss of life or injury are very important in devising fire safety measures and should be recorded on the fire reports.

Of course, the completed fire report should indicate the value of buildings, machinery and contents involved in the fire and the loss on each of these component values. Indirect losses such as loss of rents, loss of use and occupancy are of considerable importance at this time and should be recorded. See "Keeping Loss Figures Straight," VOLUNTEER FIREMEN for October, 1941, p. 6.

Another very important department of a well compiled fire report is usually headed "Reason for Large Loss." This should be filled out for every fire involving more than the most trivial losses and should attempt to briefly summarize the factors responsible for the extent of the fire. Many fire protection men consider this the most important part of the report because it shows the lessons of the fire.

Numerous other details can be included on a fire report with profit, where they were a factor in the story of the fire. Such items would include details of record losses and the performance of safes and vaults; water supplies available, including size of mains and hydrant spacing; weather conditions including wind velocity, temperature, and relative humidity; salvage operations during and after the fire, and the condition of fire appliances after the fire.

A report of a fire in a building is one of the most important records kept by a fire department. This report should not only give the details of the fire damage done but to be of full value should include a good description of the property and an account of the fire fighting operations. The report form illustrated here is reproduced from one appearing in the Model Records and Reporting System for Fire Departments published by Public Administration Service. Page four of this form, not shown, includes space for a story of fire department operations and a record of the disposition of the report.

PAGE 1

_____ Company No. _____ FIRE DEPARTMENT _____
(District of) Dept. No.

REPORT OF FIRE IN A BUILDING

Location (street and number) _____ Date _____ 19__

Time of alarm _____ M. Box No. _____ Telephone _____ Auxiliary or miscellaneous _____

Discovered by _____ Was there a watchman? _____

Describe any failure of watchman, private or public fire alarm system, causing delay in receipt of alarm _____

Building where fire started (name, occupancy, etc.) _____

Height (stories) _____ Construction (fire-resistive, brick-joist, frame, etc.) _____

Walls (brick, frame, metal, etc.) _____ Partitions (frame, metal lath, blocks, etc.) _____

Floor construction (heavy, light fire-resistive, heavy timber, wood-joist, open, plastered, sheathed, etc.) _____

Roof framing (protected or bare steel, wood truss, etc.) _____

Point of origin (floor, room, industrial process, etc.) _____

Cause (in detail) _____

Violations of ordinances or state laws _____

Date property last inspected _____ 19____ By _____ Conditions found _____

Inspector's orders complied with _____

Weather Temperature _____ Relative humidity _____ Wind _____

Loss of life or injuries to members or citizens (names, details) _____

(over)

PAGE 2

Companies responding (put circles around those which did service) _____

Chief Officers at fire _____

Totals: Men responding _____ On-duty men not responding _____ Off-duty men responding _____

LOSS DATA

Owner of building where fire started _____

Address	Valuations	Damage Estimate at time of fire	Insurance Carried	Insurance Paid	Estimated Uninsured Loss
(If there was a loss on more than one building use a separate blank for reporting the loss to each building and to the occupants of each)					
LOSS ON BUILDING WHERE FIRE STARTED					

CONTENTS LOSSES TO OCCUPANTS (List all occupants where loss occurred, and put star by the one where fire started.)

Floor	Name of Occupant	How Occupied				

RECAPITULATION OF LOSS	Building	Contents	Total
Valuations			
Damage estimate at time of fire			
Insurance carried			
Insurance paid			
Estimated uninsured loss			
Total loss (insured and uninsured)			

PAGE 3

EXTINGUISHERS USED		HOSE LINES USED			SPRINKLERS AND COVERS		
No.	Type	No.	Size	Total Feet	Floor of Building	Number of Sprinklers Operated	Number of Watergood Causes Spread
	Soda-Acid		Booster				
	Pump Tanks		1½-inch				
	Foam		2½-inch				
	Loaded Stream						
	Carbon Tetrachloride		LADDERS USED				
	Carbon Dioxide	No.	Type	Total Feet			
	Dry Chemical		Aerial				
	Water Pails		Wall				
			Roof				

How fire was controlled (credit to which appliance) _____

Sprinkler system: ☐ Wet ☐ Dry Other _____ Any failure of system _____

Sprinkler system put back in service before leaving? _____

Total gallons of water used (approximate) _____

EXTENT OF FIRE AND INVENTORY OF DAMAGE: (Cover points listed)

1. Through what doors, windows, or floor openings did fire spread.
2. Name the room or parts of building to which fire spread, listing the furnishings or material which burned in each room of each floor, and stating damage to each.
3. Performance or failure of sprinklers. Other private protection used.
4. State where fire walls, fire doors, fire shutters, wired glass, or other protection retarded the spread of fire or failed to do so.
5. Relative position of buildings to which fire spread and the building where fire started. Attach a sketch to this report if possible.
6. Description of damage to these buildings. Report any buildings left in dangerous condition.

Volunteer Firemen Can Get Tires and Gasoline Needed to Respond to Fires

THE N.F.P.A. has been receiving many inquiries from member volunteer departments regarding their need for gasoline and tires to enable their members to respond to fires in private cars. Accordingly, the editors of VOLUNTEER FIREMEN wrote to U. S. officials responsible for gasoline and tire rationing inquiring whether volunteer firemen would be permitted to obtain recapped or retread tires and gasoline needed to respond to fires in their private automobiles. The replies received from the Tire Rationing Branch and the Gasoline Rationing Branch of the U. S. Office of Price Administration should give some encouragement to volunteer firemen.

A report by Robert S. Betten, Chief, Tire Rationing Branch, OPA, says in part: "With the advent of mileage rationing more recapped tires have been made available, as well as various grades of new tires manufactured from reclaimed rubber. Every attempt is being made under the new program to keep some kind of tire equipment on essential passenger cars and we believe that the needs of volunteer firemen may now be met more adequately.

"We are enclosing a statement indicating the general eligibility provision for gasoline rations based on occupational activities. Tire replacements are authorized on the basis of the minimum grade tire that will serve for the mileage granted in the gasoline ration book."

A reply from John R. Richards, Chief, Gasoline Rationing Branch, OPA, is even more encouraging. Mr. Richards writes in part: We are enclosing a prepared statement (GR-1) which explains the nation-wide Mileage Rationing Regulations in regard to supplemental rations available for occupational purposes. Your attention is directed to paragraph (a) on page 2 of the statement. This paragraph indicates the officials who may be eligible for preferred mileage or "C" rations. Volunteer firemen may qualify for preferred mileage under this paragraph.

"The local War Price and Rationing Board cannot grant preferred mileage to a Government employee, agent, or representative, even though the applicant has met all the requirements, unless his application has been certified by an official empowered to authorize travel. A volunteer fireman making application for preferred mileage must estimate the mileage necessary for the performance of his duties. It must be remembered, however, that daily or periodic travel between home or lodgings and a regular place of work is not included in preferred mileage."

The section of the OPA regulations applicable to volunteer firemen read as follows: "The Regulations provide that mileage driven in a passenger automobile or motorcycle by the owner or person entitled to the use thereof, necessary for carrying out one or more of the following purposes, shall be deemed preferred mileage:

(a) By a duly elected or appointed agent, officer, representative or employee of a Federal, State, local or foreign government or government agency, for performing the official business or carrying out an official function of such government or government agency."

IT is the intent of the gasoline rationing program to provide both gasoline and tires for essential civilian driving. The actual authorization of supplemental rations, however, is left in the hands of the local rationing board.

It is suggested that where the fire department members have had difficulty in getting adequate gasoline to respond to alarms or need tire replacements for the same purpose, the fire chief should take the matter up with the local rationing board and try to obtain the gasoline and tires that are actually essential to the fire fighting service. In such an interview the chief might cite the official OCD regulations and statements contained in this article and point out that while the real purpose of the rationing program is to restrict needless driving in order to conserve rubber, it is also intended to assure gasoline and tires for all essential civilian services including fire protection.

WHILE it is the purpose of the government to make available tires and gasoline needed for essential civilian services such as fire fighting it does not follow that firemen are a privileged group who need not be careful to conserve our limited supplies of rubber and of gasoline in areas where there is a shortage of petroleum products. There are perhaps a million volunteer and auxiliary firemen in the United States so that any gasoline and tire conservation measures taken by such an important group can be a major contribution to the war effort. Each volunteer fire department should take the following steps to reduce the use of tires and gasoline:

(1) Make plans whereby several firemen will respond to fires together rather than having each member of the fire department respond to the fire in his individual car. (2) Have one or two cars respond to fire headquarters or other concentration points to pick up members who do not live close enough to ride to fires on the apparatus. (3) Exercise the utmost care when operating both fire apparatus and private cars in order to avoid damage to tires because such damage may mean premature failure of the tires. If tires fail and must be replaced it is the policy of the government to authorize tire replacements on the basis of the minimum grade of tire that will serve for the mileage granted in the gasoline ration book. As fire departments do not as a rule run a very large mileage in the course of a year it may be that the replacement tires authorized will not come up to the quality usually employed, particularly as concerns the private cars of volunteer firemen. This is because the needs of the armed forces must come first.

New York State Fire Mobilization Law

LAST month the New York State War Council under the authority of the State War Emergency Act adopted a resolution providing for a state office of fire mobilization under State Fire Administrator James J. Higgins, former fire chief at Schenectady.

While the resolution makes it clear that the local fire chief is always in charge at fires, the state fire administrator is empowered to direct fire fighting equipment and personnel anywhere within the state in the event of an air raid or equivalent emergency.

Other responsibilities assigned to the state administrator include:

1. Keeping an up-to-date inventory of all fire fighting facilities in the state.
2. Handling the distribution of OCD apparatus to be distributed by the state.
3. Requiring standardization of hose threads. The N.F.P.A. recommended National Standard is adopted as the New York State standard.
4. Encouraging the adoption and perfection of mutual aid plans.
5. Making regulations on the organization and training of auxiliary fire fighting units.

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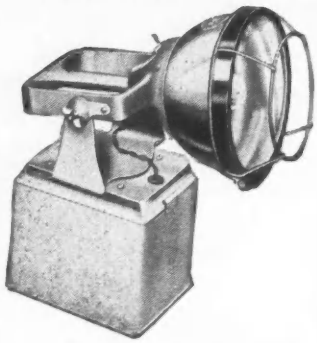

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Gasoline Hoarding a Problem with Nation-Wide Gasoline Rationing

NATION-WIDE gasoline rationing became effective in the United States last month, ending a wild scramble by certain motorists to lay in a reserve stock. They are reported to have stored their precious fuel in everything from abandoned filling stations to open dishpans, this despite drastic warnings from fire department officials.

Today there may be thousands of gallons of gasoline illegally and dangerously stored in cellars and private garages; enough to cause a tragic record of fires and explosions. Already there have been reports of several fires involving hoarded gasoline. True, these occurrences will diminish as the hoarded supply is consumed but this tapering off process might normally require some months as the surplus is held for pleasure driving. The fire toll from hoarded gasoline is likely to be serious unless fire officials can eliminate these improperly stored caches of gasoline.

The gasoline hoarding problem was a subject of discussion by state and city fire marshals attending the recent mid-winter meeting of the N.F.P.A. Fire Marshals' Section held in Chicago. Suggested remedial action included vigorous publicity campaigns to teach the dangers of improper storage and use of gasoline, and a stepped-up dwelling inspection program by fire department members.

Familiarity breeds contempt, and millions of persons who use gasoline in their automobiles still do not realize the great danger of the improper use of gasoline.

Gasoline vapor is heavier than air; consequently it will float along near the ground, like an invisible stream, for considerable distances. In a lean mixture (a little less than 2 per cent) 5 gallons of gasoline would produce 8,000 cubic feet of burnable or explosive gas (gasoline-air mixture), or enough to fill a room having the dimensions 20 by 40 by 10 feet. If ignited, this mixture may expand to six or seven times the initial volume of air and gas vapor, with destructive results.

As with other gases and vapor, before an explosion of gasoline vapor can occur a definite proportion of air and gasoline vapor must be present. In 100 parts by volume of air and gasoline, an explosion will not take place if there is less than one or more than 6 parts of gasoline vapor. In other words the explosive range is between one and about six per cent of gasoline vapor. This range of explosibility, while narrow, nevertheless indicates the great importance of not allowing even a little gasoline to be exposed in a room or confined space.

At the winter conference of the Fire Marshals' Section of the N.F.P.A., Fire Chief Robert Maguire (right) of Gary, Indiana, displayed photographs showing the variety of containers used by one resident of his city to store 75 gallons of gasoline in the cellar of his home. The containers ranged from junked automobile fuel tanks to 2-quart preserve jars. Fortunately the fire department learned of the hoarded fuel and effected its removal.

MANY persons do not appreciate the dangers that may result from the improper handling of gasoline. Dangerous vapors are given off when gasoline is poured from one container into another or when the liquid is exposed to the air, thus forming an explosive mixture of vapor and air which may be ignited very easily. Such pouring should not be done near open flames or lights, or near engines and motors while they are running. Smoking and electric and metallic sparks also are sources of ignition that should be guarded against.

Another source of ignition is static electricity. Static electricity can be generated by gasoline in a number of ways. It is generated by gasoline flowing through either a metal pipe or a rubber hose, by gasoline being poured from one container to another or being filtered through a chamois, and by gasoline swishing about inside a tank or container. Unless the containers or other equipment are grounded static charges accumulate and eventually escape to ground. Sparks thus produced may result in an explosion of gasoline vapors.

WHEN reasonable safety precautions are observed fire dangers attendant with the filling of gasoline tanks are minimized at gasoline filling stations where provision has been made for control of static and other fire hazards from handling gasoline. Such safety controls are not likely to be found where hoarded gasoline is used by individuals.

The N.F.P.A. Suggested Ordinance Regulating the Use, Handling, Storage and Sale of Flammable Liquids and the Products Thereof, edition of 1942, prohibits the storage of gasoline and similar flammable liquids in frame buildings inside of the fire limits of a city and limits the storage in frame buildings outside the fire limits to a total of 10 gallons to be stored in sealed containers or safety cans. In other than frame buildings the storage within the fire limits is limited to not over 10 gallons per building, the gasoline to be stored in sealed containers or safety cans. Outside of the fire limits the amount of storage is limited to 50 gallons to be stored in sealed containers or safety cans.

All grades of gasoline are highly flammable and dangerous. They always should be treated as such. The better grades are more hazardous to handle than the others as they are much more volatile. Nevertheless, all gasoline is too dangerous to hoard in improper containers which may leak or become broken allowing fumes to escape

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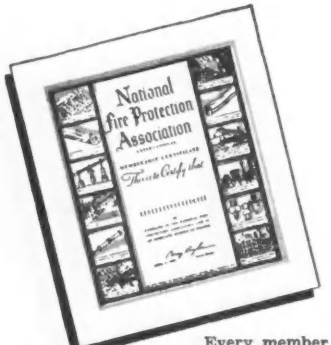

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• N.F.P.A. membership costs ten dollars per year but if more than ten firemen want to receive the magazine, an additional one dollar should be sent for each fireman in excess of the first ten enrolled.

• Your company can start the New Year right by enrolling in the Volunteer Firemen's Section of National Fire Protection Association.

ANNOUNCEMENTS

THE Hauck Manufacturing Co., 124-136 Tenth St., Brooklyn, N. Y., has recently published a bulletin entitled "Keep Ahead of Winter Troubles." This illustrated booklet describes the line of Hauck thawing equipment for melting ice and snow. Of interest to fire departments are certain superheated steam thawers suitable for use in quickly thawing frozen hydrants and water pipe lines. Write direct to the Hauck Mfg. Co. for your copy of Bulletin No. 1038.

THE Trojan Products & Mfg. Co., 3130-36 So. Wabash Ave., Chicago, has developed an oil-absorbent compound known as "QUIK-SIL." This odorless, dustless compound soaks up oil from cement, wood and metal floors as a blotter soaks up ink, and is consequently useful in garages, fire stations, and around machinery. Whereas sawdust and similar materials often used for this purpose constitute no small fire hazard in themselves, "QUIK-SIL" is non-combustible. The manufacturer will be pleased to send full details and a sample upon request.

TYPICAL fires which have been hampering our war effort are pictured in the third edition of National Defense Fires published by the National Fire Protection Association. This pictorial bulletin was enclosed with the December News Letter sent to all member fire departments. Additional copies are available at the N.F.P.A. Executive office at 10 cents each; $7.50 a hundred.

View of the new 4-gallon pump tank extinguisher typical of more than 2,000,000 such units which OCD is distributing to communities in defense areas. The extinguisher has a tapered tank to permit nesting of the containers when disassembled for shipping in order to save valuable cargo space.

Publications for Wartime Fire Protection

(Write for a free copy of "The Story" listing many other authoritative N.F.P.A. publications on fire protection).

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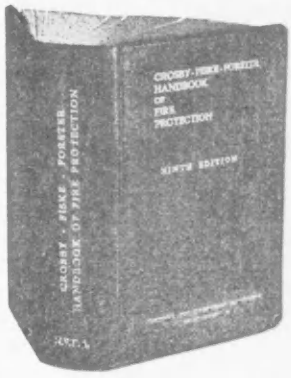

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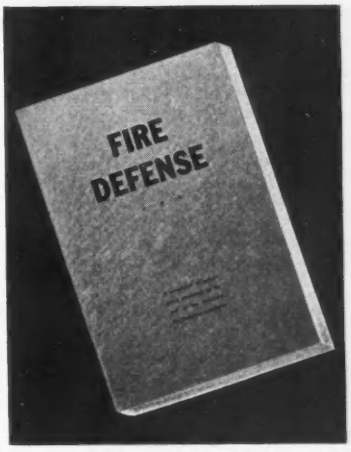
PART V.—COMMUNICATIONS

PART VI.—DEFENSE PRODUCTION



ORDER FORM VF 143

Date .....

Please send us copies of the following publications for which $ is enclosed.

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Training Manual for Auxiliary Firemen ($1.50 per copy)
Fire Defense ($1.50 per copy)
Handbook of Fire Protection ($4.50 per copy)

Name ..... Address .....

NATIONAL FIRE PROTECTION ASSOCIATION, 60 Batterymarch Street, Boston, Mass.

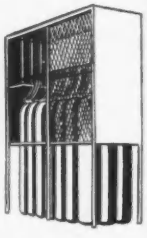
FIRE and how to fight it!

HOW OFTEN SHOULD EXTINGUISHERS BE RE-CHARGED?

Is your plant's fire-fighting equipment in top-notch condition—ready for a sudden emergency?

Even the very finest portable extinguishers cannot retain full effectiveness *indefinitely*.

Some day one of your extinguishers may be called on to save your plant. Insure reliability of your fire-fighting equipment. Follow the simple rules charted below.

CARBON DIOXIDE	DO THIS ONCE EACH YEAR Weigh to detect leakage. If extinguisher shows loss of weight of less than 10% of rated capacity, *stamped on label*, nothing need be done. Recharge if weight loss shows greater than 10%.	WILL IT FREEZE? **no**	
SODA ACID	DO THIS ONCE EACH YEAR Discharge and refill. Mix soda solution outside extinguisher, following manufacturer's instructions. Use lukewarm, not hot water. Wash all parts with water. Examine for clogging or corrosion.	WILL IT FREEZE? **yes** Do not keep outdoors in cold weather.	
PLAIN WATER	DO THIS ONCE EACH YEAR Inspect by removing and weighing carbon dioxide cartridge. Replace cartridge if weight loss exceeds ½ ounce. Inspect hose and nozzle for clogging or corrosion, and check the quantity of water.	WILL IT FREEZE? Ordinarily yes, but some water extinguishers are protected against freezing. Label gives this information.	
FOAM	DO THIS ONCE EACH YEAR Recharge. Mix solution outside the extinguisher according to manufacturer's exact directions. Wash all parts thoroughly with water. Test hose. Examine for corrosion or clogging.	WILL IT FREEZE? **yes** Do not keep outdoors in cold.	
VAPORIZING LIQUID	DO THIS ONCE EACH YEAR Test by partially discharging. Pump a few strokes with extinguisher first aimed upward and then downward. Replace lost liquid, as furnished by manufacturer.	WILL IT FREEZE? **no**	
DRY COMPOUND	DO THIS ONCE EACH YEAR Remove and weigh carbon dioxide cartridge. Replace if it shows loss of weight of more than ½ oz. for 12 lb. extinguisher or 1 oz. for the 20 lb. size. Check quantity of dry compound and determine that it is free-flowing.	WILL IT FREEZE? **no**	
 BUILT-IN CARBON DIOXIDE SYSTEM	DO THIS ONCE EACH YEAR Weigh cylinders to check loss of contents. Blow out carbon dioxide lines. Check all releases, thermostats, tubing, switches, pull boxes and electric lines.	WILL IT FREEZE? **no**	

NOTE: *RECHARGE EXTINGUISHERS IMMEDIATELY AFTER USE, EVEN THOUGH ONLY PARTIALLY EXPENDED.*

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